

**April 2001
FACT SHEET
Cameron Trading Post
NPDES Permit No. AZ0021610**

I. Introduction

Cameron Trading Post was issued an NPDES Permit (AZ0021610) on April 9, 1996 for its wastewater treatment facility. The permit became effective on May 12, 1996 and expired at midnight May 11, 2001. The permittee submitted a permit renewal application to USEPA Region 9 for reissuance on February 15, 2001.

Applicant address: Cameron Trading Post
P.O. Box 339
Cameron, Arizona 86020

Facility contact: Mike Davis
(520) 279-2231

II. Background

The Cameron Trading Post wastewater treatment facility is located in Cameron, on private land surrounded by Navajo Nation reservation in Coconino County, Arizona, at latitude 35° 52' 34" N, longitude 111° 24' 52" W (Township 29N, Range 9E, Section 22). Based on information provided in the February 2001 permit renewal application, the facility serves a population of approximately 660 and has a design flow capacity of 0.066 MGD. The average daily flow rates were 0.028 MGD in 1999 and 0.033 MGD in 2000. A lower flow capacity basis of 0.054 MGD was used in determining the permit limits in the previous permit and is being used in the proposed permit, as the reported average flow rates were significantly lower than the design flow capacity.

The treatment facility, which receives only domestic sewage, includes dual train activated sludge aeration tanks, three (3) clarifiers, two (2) sludge holding tanks, three (3) sludge drying beds, and an ultraviolet light disinfection unit installed in 1997. Effluent will be discharged via discharge pipe located approximately one-half mile downstream in the Little Colorado River. Any sampling and monitoring under the proposed permit shall be performed at Outfall No. 1.

EPA has determined that there are no endangered species of concern in the discharge area so no requirements specific to the protection of endangered species are in the proposed permit. A copy of the permit and fact sheet is being sent to the U.S. Fish and Wildlife Service for review during the public comment period.

The proposed permit will contain similar conditions as the previous permit with the addition of new requirements for biosolids monitoring.

III. Navajo Nation Water Quality Standards

Pursuant to the Water Quality Act of 1987 and the "EPA Policy for the Administration of Environmental Programs on Indian Reservations" (November 8, 1987), EPA will work directly with Indian Tribal governments on a one-to-one basis. This conforms with the Federal Indian Policy of January 24, 1983. The Navajo Nation has received Treatment as a State (TAS) for Section 106 of the Clean Water Act (CWA) but has not applied for TAS under Section 303. Section 106 grant money is used to develop water quality standards and use designations, which must be approved under Section 303 by EPA Region 9. On September 7, 1999, the Navajo Nation completed and adopted water quality standards for the nation's waters. These water quality standards along with a TAS application under Section 303 was submitted to EPA in November 1999. In the interim until the Navajo Nation's water quality standards are approved by EPA, those water quality standards will be used on a best professional judgement basis for purposes of developing water quality based effluent limitations.

IV. Basis of Proposed Permit Requirements

The proposed discharge limitations are based on:

A. Secondary Treatment Regulations contained in 40 CFR Part 133, Sections 133.101 through 133.105, promulgated September 20, 1984, and most recently amended on January 27, 1989. EPA used these regulations using its best professional judgment (BPJ) to develop limits for this facility.

B. Navajo Nation Water Quality Standards, September 7, 1999.

V. Designated Uses of the Receiving Water

The designated uses of the receiving waters (Little Colorado River), as defined by the Navajo Nation's water quality standards, are domestic water supply, primary human contact, secondary human contact, ephemeral warm water habitat, and livestock and wildlife watering (p. 18).

VI. Determination of Effluent Limitations, Monitoring, and Reporting Requirements

A. Flow Rates

Under the proposed permit, there are no flow limits but the flow must be monitored and reported. The monitoring frequency is once per month, same as the previous permit.

B. Five-Day Biochemical Oxygen Demand (BOD₅)

Under the proposed permit, the discharge shall not exceed a weekly average of 45 mg/l and monthly average of 30 mg/l BOD₅, and shall achieve no less than a monthly average rate of 85% removal. These limits are required under 40 CFR Section 133.102(a).

Under 40 CFR Section 122.45(f), mass limits are required for BOD₅. Based upon the design flow of 0.054 MGD, the mass limits for BOD₅ are based on the following calculations:

Monthly Average

$$\frac{0.054 \text{ MG}}{\text{day}} \times \frac{30 \text{ mg}}{\text{l}} \times \frac{8.345 \text{ lb/MG}}{1 \text{ mg/l}} \times \frac{0.45 \text{ kg}}{\text{lb}} = 6.15 \text{ kg/day}$$

Weekly Average

$$\frac{0.054 \text{ MG}}{\text{day}} \times \frac{45 \text{ mg}}{\text{l}} \times \frac{8.345 \text{ lb/MG}}{1 \text{ mg/l}} \times \frac{0.45 \text{ kg}}{\text{lb}} = 9.23 \text{ kg/day}$$

Daily Maximum

$$\frac{0.054 \text{ MG}}{\text{day}} \times \frac{90 \text{ mg}}{\text{l}} \times \frac{8.345 \text{ lb/MG}}{1 \text{ mg/l}} \times \frac{0.45 \text{ kg}}{\text{lb}} = 18.45 \text{ kg/day}$$

The monitoring frequency is once per month. These limits are consistent with those in the previous permit.

C. Total Suspended Solids (TSS)

Under the proposed permit, the discharge shall not exceed a weekly average of 45 mg/l and a monthly average of 30 mg/l TSS, and shall achieve no less than a monthly average rate of 85% removal. These limitations (Alternative State Requirements) are consistent with 40 CFR Sections 133.101(f), 133.102(b) and 133.103(c). Mass limit requirements in accordance with 40 CFR 122.45(f) have also

been set in the proposed permit. Mass limits are based upon the same calculation shown above for BOD₅. The weekly average is 11.15 kg/d and the monthly average is 7.44 kg/d. The monitoring frequency is once per month. These limits are consistent with those in the previous permit.

D. Fecal Coliform

In the proposed permit, the monthly logarithmic mean of fecal bacteria shall not exceed 100/100 ml, as a geometric average of samples collected during the calendar month, and 200/100 ml as a single sample maximum. These limits are more stringent than those in the previous permit and are based on the Navajo Nation Water Quality Standards for domestic water supply (p. 24). The monitoring frequency is once per month.

E. Total Residual Chlorine (TRC)

The proposed permit requires chlorination of the effluent before discharge. For the intermittent discharge, no single sample shall exceed 11 ug/l for TRC. The monthly average and daily maximum mass limits are 10.25 gram/day. These limits are identical to those in the previous permit. This requirement is consistent with the Navajo Nation Water Quality Standards (p. 28). The monitoring frequency is once per week.

F. Settleable Solids

The proposed permit requires monitoring and reporting of effluent settleable solids. The regulations at 40 CFR 122.44(i) allow requirements for monitoring as determined to be necessary. The discharge shall not exceed a daily maximum of 2.0 ml/l and a monthly average of 1.0 ml/l, identical to those in the previous permit. The monitoring frequency is once per month.

G. pH

The proposed permit requires that effluent pH not fall below 6.5 or above 9.0 standard pH units, identical to those in the previous permit. These are consistent with the Navajo Nation water quality standards. The monitoring frequency is once per week.

H. Reporting

The proposed permit requires discharge data obtained during the previous three months to be summarized and reported monthly. If there is no discharge for the month, indicate "Zero Discharge." These reports are due January 28, April 28, July 28, and October 28 of each year. Signed copies of these, and all

other reports required herein, shall be submitted to the EPA Regional Administrator.

I. General Standards

The proposed permit sets general standards that are narrative water quality standards contained in the Navajo Nation Water Quality Standards, Section 203. These general standards are set forth in Section B. General Discharge Specifications of the permit.

VII. Permit Reopener

At this time, there is no reasonable potential to establish any other water quality-based limits. Should any monitoring indicate that the discharge causes, has the reasonable potential to cause, or contributes to excursion above a water quality criteria, the permit may be reopened for the imposition of water quality-based limits and/or whole effluent toxicity limits. The proposed permit may be modified, in accordance with the requirements set forth at 40 CFR 122.44 and 124.14, to include appropriate conditions or limits to address demonstrated effluent toxicity based on newly available information, or to implement any EPA-approved new Tribal water quality standards.

VIII. Biosolids Requirements

The permittee shall submit a report 60 days prior to disposal of biosolids. The report shall discuss the quantity of biosolids produced, the treatment applied to biosolids including process parameters, disposal methods, and, if land applied, analyses for Arsenic, Cadmium, Chromium, Copper, Lead, Molybdenum, Nickel, Zinc, and Selenium expressed in mg/kg dry biosolids. The permittee shall comply with all standards for biosolids use and disposal of Section 405(d) of the CWA, and 40 CFR Parts 257, 258 and 503.

IX. Written Comments

Persons who wish to comment upon, object to the proposed action, or request a public hearing pursuant to 40 CFR Section 124.11 should submit their comments and requests in writing within thirty (30) days from the date of the Public Notice, either in person or by mail to:

U.S. Environmental Protection Agency, Region IX
CWA Standards and Permits Office (WTR-5)
Attn: Linh Tran
75 Hawthorne Street
San Francisco, CA 94105
Telephone: (415) 744-1901

X. Information and Copying

The Administrative Record, which contains the draft NPDES permit, the fact sheet, comments received, and other relevant documents, is available for review and may be obtained by calling or writing to the above address.

All comments or objections received within thirty (30) days from the date of the Public Notice will be retained and considered in the formulation of the final determination regarding the permit issuance.

XI. Public Hearing

When public interest warrants, the Regional Administrator shall hold a public hearing and such notice of hearing shall be issued by public notice at least thirty (30) days prior to the hearing date. A request for a public hearing must be in writing and must also state the nature of the issue proposed to be raised in the hearing.